

BRIEF COMMUNICATION

THE HYLID FROG *LITORIA ALBOGUTTATA* (GÜNTHER) IN THE NORTHERN TERRITORY

Knowledge of the diversity and biology of the anuran fauna of the Northern Territory has increased substantially over the past 30 years. In 1961 15 of the currently recognised species had been reported¹ but by 1986 the number had tripled to 45².

During taxonomic studies in the late 1960s^{3,4} that contributed to the resolution of the N.T. anuran fauna, a specimen from Alexandria Station identified as *Cyclorana alboguttata* in 1935⁵ was re-examined because it represented the only record of the species in the Northern Territory, and its specific identity had been the subject of dispute^{5,7}. The specimen was demonstrated to be a misidentified topotypic individual of *C. cultripes* Parker, whilst *C. alboguttata* was shown to possess intercalary cartilages, causing it to be referred to *Litoria* Tschudi⁸. The geographic distribution of *L. alboguttata* was plotted from all known museum voucher specimens and demonstrated to be confined to Queensland and northern New South Wales⁸.

In recent years *L. alboguttata* has been collected on a number of occasions in the Northern Territory at sites near the mouth of the McArthur River in the vicinity of Borroloola, leading to the inclusion of a portion of the western boundary of the N.T. in a revised distribution map⁹. It has also been reported approximately 20 km northeast of Devil's Marbles, considerably further south than the other records¹⁰.

Because the places of lodgement of the specimens on which these locality records are based have not been reported, we provide this information here. The specimens examined are deposited in the Australian Museum, Sydney, (AM), the National Wildlife Collection, CSIRO, Canberra (NWC), the Northern Territory Museum & Art Gallery, Darwin (NTM) and the South Australian Museum, Adelaide (SAM). Methods of measurement follow Tyler¹¹.

All of the specimens of *L. alboguttata* that were examined were taken at two sites. The first is an area of seasonally inundated grassland extending for 10 km flanking the



Fig. 1. *Litoria alboguttata* collected on Carpentaria Highway, 9 km west of Borroloola, N.T. (Photo: M. Diviac).

Carpentaria Highway from its termination 1 km south of the Borroloola township, and 2 km east of the causeway crossing of the McArthur River. (Floodwaters flow north into the Rocky Creek catchment, and then east to discharge into the McArthur River - a distance of 8 km). The floodplains extend for only 10 km west, where the Carpentaria Highway rises to pass to the north of the Bukalara Range. From various points along this section 20 specimens have been collected: AM R53214, 53650-52, 53654-62, 54490, 56923; NWC A536, 538; NTM R17749; SAM R33907, 40749. One specimen collected in the Borroloola area by W. J. Freeland (pers. comm.) has been seen by us but its whereabouts is unknown.

The second site is the Mingarda Waterhole on Batten Creek. This waterway arises west of the Carpentaria Highway and the Bukalara Range approximately 50 km from Borroloola. Mingarda Waterhole is near its termination approximately 30 km northeast of Borroloola at the edge of the saline coastal flats. Specimens from that site are AM R53532 and NWC A586-90.

The specimens reported from near the Devil's Marbles¹⁰ (NTM 30446-7) have been examined by one of us (M.J.T.) and reidentified as juvenile *C. australis*.

In the key to frogs of the northeast of the N.T.², *Litoria alboguttata* keys out to *Cyclorana australis*. Both are fossorial species with size ranges that overlap: *L. alboguttata* males 54-67 mm snout to vent length, females 61-83 mm, *C. australis* males 71-79 mm, females 71-102. Each species has an enlarged inner metatarsal tubercle employed for burrowing, but *L. alboguttata* is distinguished externally by its exceptionally rugose skin with short, broad, disrupted plicae on the dorso-lateral surfaces (Fig. 1). In contrast the skin of *C. australis* is smooth apart from narrow continuous dorso-lateral folds. In addition *L. alboguttata* possesses a very narrow vertebral stripe not exhibited by *C. australis*.

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¹Moore, J. A. (1961) Bull. Amer. Mus. Nat. Hist. 121, 149-386.

²Tyler, M. J. & Davies, M. (1986) "Frogs of the Northern Territory". (Conservation Commission of the Northern Territory, Alice Springs).

³Tyler, M. J. (1968) Rec. S. Aust. Mus. 15(4), 711-727.

⁴Tyler, M. J. (1969) *Ibid.* 16(1), 1-11.

⁵Loveridge, A. (1935) Bull. Mus. comp. Zool. Harv. 78, 1-60.

⁶Loveridge, A. (1949) Trans. R. Soc. S. Aust. 72, 208-215.

⁷Parker, H. W. (1940) Novit. Zool. 42, 1-106.

⁸Tyler, M. J. (1974) Proc. R. Soc. Qld 85, 27-32.

⁹Cogger, H. G. (1975) "Reptiles and amphibians of Australia". (Reed, Sydney).

¹⁰Fleming, M., Gillam, M., Hewitt, M. & Latz, P. (1983) A preliminary biological survey of portions of the McLaren Creek Pastoral Lease. (Wildlife Division, Arid Zone Research Institute, Alice Springs). (Unpublished).

¹¹Tyler, M. J. (1968) Zool. Verhand. (96), 1-203.